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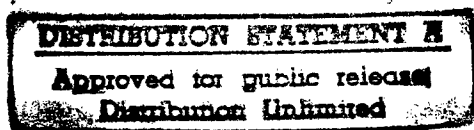
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SELECTIONS ON CHINESE TRADITIONAL MEDICINE

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## FOREWORD

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SELECTIONS ON CHINESE TRADITIONAL MEDICINE

The following are translations of selected articles  
from Ch'ing-chu Cien-kuo Shih-chou-nien I-hsueh K'o-hsueh Lun-  
wen Chi, Volume 1, Peiping, December 1959.

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## TRADITIONAL MEDICAL RESEARCH ON TREATMENT OF INFLUENZA

Following is a translation of an article by the Research Institutes of Chinese Traditional Medicine, in Ch'ing-chu Chien-kuo Shih-chou-nien I-hsueh K'o-hsueh Lun-wen Chi, Volume 1, Peiping, December 1959, pp 345-349.

Influenza is an infectious disease of common occurrence. Since the Liberation, under Party leadership, the Chinese medical policy has become well established. The close co-operation of Chinese and Western medicine in the use of Chinese drugs and acupuncture-moxibustion in treatment of influenza, has resulted in the attainment of initial accomplishments.

### I. Chinese Drug Treatments

In Chinese medicine, the treatment of influenza is determined according to the symptoms. In general, it is recognized that it belongs to the "cold" (feng-han) category, and as in bad colds, the principal medication used for relieving the symptoms of fever, stuffed-up nose, cough, mucus, headache, body ache, irregular pulse and coated tongue, are Ching-fang-pai-tu-san and Ts'ung-shih-t'ang. Symptoms such as sudden chills followed by high fever, dryness of the mouth, thirst, headache, lumbago, back and limb ache, and rapid pulse, can be alleviated with Yin-ch'iao-san and Sang-chu-san as the principal medication.

Aside from the major prescriptions, alleviation prescription according to symptoms may be used. Data from the Pharmacological Research Laboratory in Kwangsi's T'ung-tsu Autonomous District have proposed the use of Pai-shao [*Paeonia albiflora* Pall.], huang-chin [*Scutellaria baicalensis* Georgi.], huang-lien [*Pueraria thunbergiana* Berth.], ko-ken [*Coptis* Chinesis Franch.], or p'ing-wei-san in cases of loss of appetite, nausea, vomiting, diarrhea, stomach-ache, and rapid pulse. In intermittent fever and chills, chest congestion and thready pulse, use ch'ai-hu [*Bupleurum falcatum* L.] and huang-ch'in. In high fever, cough, coma, convulsions, heavy sleep with snoring, and uropenia, use shih-kao [*Calcii Sulpha*], chih-mu [*Anemarrhena asphodeloides* Bunge] and tzu-hsueh-tan. In nose-bleed and hemoptysis, use mao-ken [*Imperata amnudinacea* Cyr.], ch'ien-ts'ao [*Rubia cordifolia* L.], and chih-tzu [*Gardenia augusta* Merr.]. In frequent coughing use ma-tou-ling [*Aristolochia debilis* Sieb. et Zucc.] and sang-pai-p'i [*Monarda L.*]. In frequent vomiting, use orange peel, chu-ju [*Phyllostachys puberula* Munro.] and pan-hsia [*Pinellia tuberifera* Teu.].

In constipation, use kua-lou-jen [*Trichosanthes Japonica* Rgl.] and yuan-ming-fen [*Sodii Sulfas*]. In severe cough, use an-kung-niu-huang-wan. The Fifth Clinic of the Shang-hai Chinese Medical School Hospital recommends ch'ai-hu in chills and fever, and chest discomfort. When phlegm is coughed up, use ch'en-p'i [*Citrus nobilis* Lour.] and pan-hsia. When the nose is stopped up, there is mucus and nosebleed, use pai-mao [same as mao-ken]. In sore-throat and tonsillitis, use she-kan [*Belamcanda Chinensis* Lem.], tou-ken [*Euchresta japonica* Beuth. ?] and ma-po [*Lashiesphaera fenzi* Reich.]. With thirst, use t'ien-hua-fen [same as kua-lou-fen]. For intestinal pain, diarrhea, use tzu-su [*Perilla frutescens* Brit.], hua-hsiang-ken [*L. rugosus* Fisch.] and ch'ao-liu-ch'u.

What has been related above is the general principle of treatment, and on the basis of this dialectical principle of treatment, very good results have been achieved. For example, the Chinese Pharmacological Research Laboratory in Kwangsi's T'ung-tsu Autonomous District, in December, 1958, reported on the use of this principle in treating 15,487 cases of influenza. The results, analysis and statistics are in Table I. [See end of report.]

As can be clearly seen from the table, the use of Chinese medical principles, coupled with the active use of the dialectic treatment method, resulted in the curing of 11,472 cases (more than 75%) out of 15,487 within three days.

The Kwangsi Province People's Chinese Medical Hospital treated 4,000 cases, curing 3200, or 80%, in two days and 90% in three days.

The Nan-ning Workers' Hospital treated 1,200 cases, curing 80% within three days.

As seen from the above, the use of drugs had confirmed effective results in the treatment of influenza.

In prevention, the Tientsin Inoculation Group in Hopeh Province reports that The Chinese drugs administered to 7,830 observed cases for the prevention of influenza was effective, the incidence of disease being 1/3 to 1/6 of the control group. The symptoms were mild in those infected. The following table indicates the results of this experiment, in which yin-ch'iao-chieh-tu Wan was the prophylactic.

#### Observations on the Effectiveness of Yin-ch'iao-chieh-tu Wan

<u>District</u>	<u>Group</u>	<u>Number</u>	<u>Number Infected</u>	<u>Disease Incidence</u>
A	Protected	518	13	2.51%
	Control	236	38	16.10%
B	Protected	312	9	2.88%
	Control	184	36	19.56%
C	Protected	132	3	2.27%
	Control	98	17	17.34%
Total	Protected	962	25	2.60%
	Control	518	91	17.55%

## II. Acupuncture-Moxibustion

Not only has our national Medicine achieved fine results in treating influenza with traditional Chinese drugs, but it has also been found that acupuncture-moxibustion are effective as well.

For example, Fei T'ing-fu (裴廷輔) reports from Heilungkiang that he had obtained satisfactory results in 29 cases by using acupuncture-moxibustion treatment alone. Of the 16 who had fever, 14 returned to normal on the next day, and had regular pulses. The treatment was also effective for headache. If the treatment was instituted after the onset of the disease, the average stay in the hospital was 2.6 days. After leaving the hospital, they were able to return to work immediately. Convulsions were eliminated immediately after acupuncture. The commonly used sites were: ho-ku, t'ai-yang, feng-ch'ih, yin-t'ang, and tsu-san-li. Supplementary sites include: wei-chung, hsien-yu, ch'ih-tse, and san-yin-chiao. (In fever and headache, a three-cornered needle may be used to release blood at the t'ai-yang site. In general the pressure method (i-chih shou-fa) is used. The needle is left in 30 minutes (two to three insertions). This procedure is carried out once or twice a day.

The Yen-an Hospital in Shensi reports that in 188 cases, early treatment (first or second day) with the t'ou-t'ien-liang acupuncture technique at the ta-ch'ui site, body temperature began to fall after one to six hours. After using the ho-ku, nei-kuan, and tsu-san-li sites, temperature returned to normal within 15 hours and within 20 hours all symptoms vanished and health regained. (with the exception of four cases complicated with secondary meningitis and tuberculosis). In those patients whose temperatures had lowered in three to four days, but in whom the symptoms had not yet disappeared, the symptoms vanished immediately after acupuncture of the ho-ku, nei-kuan, and tsu-san-li sites.

According to a report by T'u Yu-sheng (傅玉生), the experimenters used acupuncture-moxibustion in treating 182 cases of influenza, cured 63.74% with one treatment, 85.72% with two treatments, and 92.52% after three treatments. Within 24 hours after treatment, body temperature had fallen to normal in 74% of the cases, and within 48 hours returned to normal in 92% of the cases. It was 95.9% within three days. The sites selected were the ta-ch'ui, ch'u-ch'ih, and ho-ku. In headache, the t'ai-yang, feng-ch'ih, lieh-ch'ueh, and t'ai-chung sites were added. In coughing, the t'ien-t'u, t'ai-yuan, and ch'ih-tse sites were added. In vomiting and intestinal pain, the chung-kuan, and tsu-san-li sites were added. In high fever and perspiration the t'ao-tao, hsia-liu, and t'ai-ch'i sites were added. When the nose is plugged and smarting, the ying-hsiang site is used. In general the ch'iang-tz'u-ch'e is used, the needle being left in 20 to 30 minutes.

According to the report by Fei T'ing-fu (裴廷輔) from Heilungkiang, good results were obtained in preventing influenza by moxa cauterization at the tsu-san-li site. Of 272 people, only one or 0.36% came down with the disease. However, in the control group of 515 persons, 38, or 7.37%, came down with the disease during the same period. The use of moxibustion during the epidemic period clearly lowers the incidence of infection.

This moxibustion method is one in which ai-chuan is used to cauterize the tsu-san-li site for 15-20 minutes, the first thing in the morning once each day, using alternate sides.

The Yen-an Hospital in Shensi reports that in 818 cases treated at the tsu-san-li site during the epidemic season, none developed the disease.

At that time, the disease incidence in Huang-p'o Hsien in Hupeh was 30%. Acupuncture neurotherapy was used as an influenza preventative on the 60 cases observed; only three came down with it, and then the symptoms were mild. After three punctures, not one case occurred. The puncture sites used were the ching-ch'ien-hou and pi-i-pu, together with the ch'ien-o, and nieh-pu (both sides). In this technique, great pressure should be used, so that after puncture there will be pain and irritation. It should be carried out once a day for three days.

### III. The Effectiveness of Experimental Prescriptions in Treating Influenza

1.. Pai-pu [*Stemona sessilifolia* Miq.] compounds (with pai-pu as the major component):

The Hsin-ch'eng Hsien Peoples' Hospital, using pai-pu compound, obtained clearly effective results in the treatment of influenza. During the epidemic period, in one elementary school, 390 healthy children (the average daily incidence of infection at the time was three to five persons) did not develop the disease after taking pai-pu compound. Pai-pu was given to treat 73 cases of influenza and after being given the drug once in water, body temperature returned to normal in many cases within eight to 12 hours. Within 24 hours, 51 cases had been cured. With two doses, another 22 were cured within 48 hours. Within four days the influenza was controlled.

Using this drug to treat 3,568 cases, with one dose per day, 50% were cured in one day, and 90% in two days. In the 865 persons given preventative treatment who were observed, not one came down with the disease.

2. Chu-k'u-tan: (Three times a day, 5-10 hao-sheng per dose).

In the Chia-hsing Special District of Chekiang, Chu-k'u-tan was used in treating 16 cases of influenza, and on the average cured it in two to four days. The shortest period was half a day, the longest, four days. In those with high fevers, the temperature returned to normal after two to three doses.

3. Hsiang-lien Wan:

In the Nan-ning Municipal Clinic, Hsiang-lien Wan was used during the epidemic period to treat 100 cases of influenza in which body temperature was as high as 39-40 degrees Centigrade. One day after treatment, the fever had gone down in 80% of the cases, and within two days all cases had been cured.

4. 3% Huang-lien Infusion: (one-tenth of an ounce (i-ch'ien) of huang-lien powder, infused in 300 hao-sheng of water for 10-12 hours, filtered, and the sediment used to make the 3% huang-lien infusion).

In Chu-shan Hsien, Hupeh, a 3% Huang-lien infusion was given by nose drops three times a day for five to seven days in order to prevent influenza, and of 385 healthy persons so protected during the epidemic season, not one came down with the disease.

5. Kan-huo-hsiang, Kan-p'ei-lan, and Kan-po-ho decoctions:  
The Tientsin District Innoculation Group in Hopeh used these decoctions to protect 5,488 persons. The results are in the table below.

<u>District</u>	<u>Group</u>	<u>Number of Persons</u>	<u>Number Infected</u>	<u>Rate of Incidence</u>
A	Protected	4,459	157	3.52%
	Control	1,324	189	14.27%
B	Protected	374	13	3.47%
	Control	128	32	25.00%
C	Protected	655	21	3.20%
	Control	507	134	26.41%
Total	Protected	5,488	191	3.47%
	Control	1,959	355	18.12%

Aside from the above simple drugs, there are many others which have proved effective.

From this it can be seen that preliminary accomplishments have been attained in prevention and treatment with popular remedies.

#### IV. Discussion on Mechanism

1. The Seventh Military Medical College, in a report concerning "the effect of Yin-ch'iao-san compound on the PR8 strain Type A influenza virus," has shown that, in vitro, Yin-ch'iao-san compound in concentrations of 1:100 to 1:1,000, was lethal to  $10^{-4}$  PR8 Type A influenza viruses. Concoctions of Yin-hua and Lien-ch'iao also had a quite strong antibiotic action.

2. In a report by the Biological Research Laboratory of the Hupeh Province Health and Disease Prevention Station concerning, "the effects of Chinese drugs on the influenza virus," confirmed by experiments with ten day chick embryos, that Huang-lien has an inhibitive but non-lethal action on all strains of influenza virus (e.g. PR8 strain, Type A 56-S8 strain, Type A FM<sub>1</sub> strain, Type B LEE strain, and Type C 1233 strain.)

3. The Fukien Province Communicable Disease Research Laboratory has reported in "The effect of the Chinese drug Pai-pu on the influenza virus" that they have drawn the conclusion that pai-pu has an inhibitive action as Asian Type A influenza virus. They have also proved in experiments using oral and intraperitoneal injections in mice, that pai-pu has a definite prophylactic and therapeutic efficacy.

From the above reported research it can be seen that there are a number of prescriptions which inhibit the Type A Asian Influenza virus. Of these, Huang-lien is the most effective. However, their action, and their mechanism when used to prevent and treat influenza in vivo are still not clear, consequently await further research.



## V. Conclusion

Since 1957, influenza in China has been largely caused by the Asian Type A influenza virus. The symptoms that it produces are most frequently manifested in the respiratory system and a high temperature. Based on Western medical statistics, the general time required to cure the disease is four to seven days. In some cases there is also a persistent cough that may last for two to three weeks. However, using Chinese medical methods during the epidemic period, the illness period is shortened, and in general the illness cured in two or three days. Using acupuncture, recovery can occur in one to two days, the symptoms rapidly disappearing, thereby alleviating the patient's suffering. After the disappearance of the symptoms, barely a weeks recovery period is required before the patient is able to return to work. This is positive treatment, particularly when used with acupuncture.

When Chinese drugs or acupuncture and acupuncture (Tz'u-ch'e) neurotherapy are used in prevention of influenza, the incidence of infection is only about 1/6 that of the non-protected control group, demonstrating that it is definitely effective as a prophylactic. If early preventative measures are taken, the results can be even greater. Chinese methods of preventing influenza (especially acupuncture) are simple (acupuncture can be done by the patient himself) and reasonable in cost, and the drugs are locally available. There are no reactions following their use, and they do not affect production and work. Considered from the aspects of conditions, manpower, and resources, the use of Chinese methods for the prevention of influenza is a practical necessity.

From the above it can be recognized that Chinese medicine has made definite contributions to the prevention and treatment of influenza, especially in the use of acupuncture-moxibustion, which is a quick, good, and economical principle. China is a large country with a high population, and the use of local materials for prevention and treatment of influenza in the epidemic period is particularly significant. Concerning the problem of the mechanism of prevention and treatment by traditional Chinese medicines, we are presently conducting research under the leadership of the Party and with Chinese and Western Medicines in close cooperation with each other.

Research Institutes of Traditional Chinese Medicine

TABLE I

Prescription	Drugs	Cases	Time in which Cured						5th and above			Not Ascertained			
			1st day		2nd day		3rd day		4th day						
			C	%	C	%	C	%	C	%	C	%	C	%	
Yin-ch'iao-san	Niu-huang-wan, Tzu-hsueh-tan, Shih-kao, Chiu-mu, Hsing-jen, Chu-mu, Huang-ch'in	1921	12.4		8	0.4	1151	60	362	18.8	210	10.9	181	9	0.5
			55.8		2108	24.3	2935	33.9	1767	20.4	1110	13.0	369	4.2	4.2
Yin-ch'iao-sang-chu-ko-chi	Niu-huang-wan, Tzu-hsueh-tan, Chih-pao-tan, Ch'ai-hu, Huang-ch'in, Shih-kao, Chih-mu, Shan-t'ui, Ko-ken, Huang-lien	8654	5.3		820				146	20.0	246	30.0	246	164	20
Yin-ch'iao-san; Hiao ch'ai-h-t'ang	Kou-t'eng, Fang-t'ui, Su-tzu, Hsing-jen, Fang-feng	820	5.3												

Yin-ch'iao-san, sang-chu-san, Hsiao-ch'ai-hu-t'ang	Pai-hu-t'ang, Niu-huang-wan, Tzu-hsueh-tan, Tzu-ko-chieh-chi, Ching-fang-pai-tu-san	3075	19.9	646	21.4	1086	35.3	828	26.9	253	8.2	149	4.8	113	3.6
Yin-ch'iao-sang-chu-pai-hu-ho chu	According to symptoms	400	2.6					152	38	160	40	88	22		
Hsiao-ch'ai-hu-ko-ken, ch'in-lien-liang-ko-san-ho-chi	According to symptoms	389	2.5	176	45.2	128	32.9	31	8	6	1.5	5	1.3	43	11.1
Hsiao-ch'ai-hu-pai-hu-t'ang-tzu-ko-chieh-chi ho-chi	According to symptoms	228	1.5	50	21.9	120	52.6	30	13.1	12	5.3	8	3.5	8	3.5
TOTAL		15487		2988		5420		3334		1997		1046		702	
%		100		19.3		35.1		21.5		12.8		6.8		4.5	

## TRADITIONAL MEDICAL RESEARCH ON TREATMENT OF INFECTIOUS HEPATITIS

Following is a translation of an article by the Research Institutes of Traditional Chinese Medicine in Ch'ing-chu Chien-kuo Shih-chou-nien I-hsueh K'o-hsueh Ch'eng-chiu Lun-wen Chi, Volume I, Peiping, December 1959, pp 349-352/

Infectious hepatitis is a frequently seen disease clinically, and it has been wide-spread in China in recent years with a definite prevalence in some regions. Quite satisfactory results have been obtained in treating it with traditional Chinese medical methods.

### I. Chinese Medical Theory of Infectious Hepatitis and Discussion of Treatment

In the last few years Chinese and Western medicine have joined to carry on academic research on this disease, and the literature that they have produced has been of value both in theoretical explanation and in the search for rules of treatment, and has made a definite contribution to the promulgation of traditional Chinese methods of treatment and our rich medical science.

The major clinical symptoms of infectious hepatitis are: jaundice, fever, red-dish urine, fatigue, anorexia, costalgia, abdominal distension, and liver enlargement. These symptoms are quite similar to those of the jaundice disease recorded in traditional Chinese medicine, and our medical studies have had abundant experience and theoretical knowledge of jaundice. Consequently, it has provided us with a reliable basis and method for treating infectious hepatitis.

Even before 200 B.C. there were records concerning jaundice in our national medical documents. In the description of jaundice in the Su-wen and Ling-shu, it is said: "If the eyes are yellow, it is called jaundice." "If there is yellowish-red urine, and the person reclines, it is jaundice." "If the body aches and is yellow in color, the teeth are stained yellow, and the nails are yellow, it is jaundice." In the Eastern Han period, Chang Chung-ching (张仲景) in his Treatise on Typhoid (Shang-han Lun) and Contents of the Golden Cabinet (Chin-kuei Yao-yueh) made a clinical classification of jaundice and worked out the principles of its treatment, using yin-ch'en-hao-t'ang as the major effective prescription. In the T'ang Dynasty, Sun Ssu-mo (孙思邈) pointed out that jaundice was an infectious disease. He said: "All who become infected develop a fever, and their flesh

turns yellow." In the Sung Dynasty, Ch'ien Chung-yang (錢仲陽) had an explanation concerning jaundice in children, and Ch'en Wu-tse (陳元擇) made an analysis of the factors causing the disease. In the period from the Chin to the Yuan Dynasties, Chu Tan-ch'i (朱丹溪) Chang Ching-yueh (張景岳) of the Ming Dynasty, and Shen Chin-ao (沈金鑒) of the Ch'ing Dynasty greatly developed the classification and treatment of jaundice. Our present generation of medical scientists have found precise and definitely developed methods of treatment in the accomplishments of their predecessors in jaundice research.

As a summary of recent research on infectious hepatitis, basically, the following points are commonly recognized:

1. Jaundice as discussed in traditional Chinese medicine includes infectious hepatitis.

2. According to the traditional Chinese medical classification of jaundice, it is generally classed as "yang huang" and "yin huang." It is universally acknowledged that infectious hepatitis falls into the "yang-huang" category in most cases.

3. The factor causing yang huang is largely "Rheum-fever," and the major treatment consists of "correction of rheum and fever" (ch'ing li shih-je).

4. Yin-ch'en-hao-t'ang, the major prescription is increased or decreased according to the symptoms. Acupuncture-moxibustion and popular drugs have in actual practice also been clearly effective as treatments.

As to the concrete use of prescription drugs, Dr. Pu Fu-chou (蒲輔周) of the Research Institutes of Chinese Traditional Medicine has pointed out: Infectious hepatitis consists of the classes of "fever" (je) as well as "rheum" (shih), and at the same time there are dissimilarities in the appearance of the disease. The general principles governing the relationship and prescription are as follows:

a. Fever predominant over rheum (jaundice, anuria and constipation, fever, dryness of mouth, abdominal distension, tongue coated yellow or dry and thready and weak pulse): This can be benefitted principally with yin-ch'en-hao-t'ang, and chih-tzu-po-p'i-t'ang.

b. Rheum predominate over fever: (jaundice, anuria or yellowish-red urine, chest pain, abdominal distension, tongue with yellow, slippery coat, or white, glossy coat, pulse thready or weak and slow): This can be benefitted principally with yin-ch'en-wu-ch'in-san, and kan-lu-hsiao-tu-wan.

c. With predominantly gastro-intestinal symptoms, wei-ch'in-t'ang or hsiang-sha-chi-shu-wan, are principally used.

d. If, after the jaundice has disappeared, the liver stills appears to be enlarged, use hua-chien-wan or chu-yu-t'ang below the diaphragm.

The Suchow Chinese Hospital proposes the following: In the pre-jaundice stage, use huo-hsiang-cheng-ch'i-san, ch'uan-ch'iung-ch'a-tiao-san, p'ing-wei-san, and wu-ch'in-san prescriptions. In the jaundice period, use yin-ch'en-hao-t'ang, p'ing-wei-san, wu-ch'in-san, and chih-tzu-po-p'i-t'ang prescriptions. After the jaundice has disappeared, use hsiao-yao-san, ch'ai-hu-pieh chia-chien, and kwei-chih-fu-ch'in-p'o-yu-tang.

The First People's Hospital in Chengtu, Szechwan Province has used the fan-li, chieh-piao, t'ung-li, li-tan, shu-kan, ho-chieh, and wen-yang methods to treat all types of jaundice, and using for the most part yin-ch'en-hao-t'ang, and yin-ch'en-wu-ch'in-san.

Aside from these principal prescriptions, the commonly used drugs associated with the symptoms are: Chest pain: ch'ai-hu, yu-chin, chih-k'o, and hsiang-fu. Nausea and vomiting: pan-hsia, ch'en-p'i, sha-jen, and chu-ju. Abdominal distension: poor appetite: chih-k'o, shen-ch'u, hou-p'o, and chi-nei-chin. Diarrhea: pai-shu, yun-ch'in, i-jen, and tse-hsieh. Constipation: ta-huang, mang-hsiao. Fever: yin-hua, lien-ch'iao, and tan-p'i. Slow recovery of liver function: tan-shen, t'ao-jen, hung-hua, and pieh-chia.

Although the above are only general principles of treatment, it can be seen that our traditional methods of treating jaundice can be used in the treatment of infectious hepatitis.

On the basis of reports from clinical observations throughout the country, the use of yin-ch'en-hao as the major prescription in treating infectious hepatitis with jaundice has had very effective results. For example:

The Lu-ta Chung-su Friendship Hospital used yin-ch'en-chih-tzu-t'ang to treat 75 cases of infectious hepatitis with jaundice. The various digestive tract symptoms occurring during the course of infectious hepatitis were relieved within three to five days after taking the medicine. The recovery of normal gastro-intestinal function promotes the intake and absorption of nutrients and, without a doubt, has great significance in the early healing of damaged liver and the recovery of liver function.

What stands out in those who have been treated is the drop in the number of cases of jaundice. In 68 cases observed, 66, or 97%, had returned to normal within 21 days, and among these 30% had returned to normal in seven days.

The Pediatrics Department of the 11th People's Hospital of Shanghai Chinese Medical School treated 69 cases of infectious hepatitis, dividing them into three groups, and compared them in a clinical analysis.

One group belong to the "yang huang" category. In this, yin-ch'en-hao-t'ang mixed with wu-ch'in-san was used. The second group belonged to the category of yang-huang with "rheum" predominant. Yin-ch'en-t'ang was used. In the third group, various antibiotics, and vitamins, ACTH, cortisone, glucose, and blood transfusion were used in treatment. From a comparison of the results it can be seen that in the two groups treated with Chinese drugs, the recession of jaundice and of serum bilirubin (Tan-hung-chih) and the disappearance of symptoms was more rapid than in the group treated with vitamins and other Western medications. The Chinese methods of treatment were also much less expensive.

The treatment of infectious hepatitis with traditional Chinese drugs can shorten the period of treatment and bring about an early recovery of health. This has been confirmed from actual practice. For example, the Nan-t'ung Chinese Medical Hospital used yin-ch'en-hao-t'ang and other prescriptions to treat 88 cases, curing 86 and improving the remaining two in ten to 21 days on the average.

The Wu-kang First Workers' Hospital used Ch'ing-kan-yin in treating 31 cases of infectious hepatitis, and all were cured within three to ten days of treatment.

The Pediatrics Department of the Chi-nan Railroad Management Central Hospital used ch'ing-kan-yin to treat 47 cases with an average treatment period of 4.95 days. All were cured.

As results obtained from other regions are similar, we will not enumerate these. From the above data it can be seen that yin-ch'en-hao is the major prescription in the treatment of infectious hepatitis with jaundice. On this basis each area has made its own practical developments, and although there are differences in drugs used, the principle is the same. For example, the prescription for the ch'ing-kan-yin used at the Chi-nan Railroad Hospital is: yin-ch'en, chih-tzu, tan-p'i, lung-tan-ts'ao, yu-chin, chih-shih, ta-huang, yin-hua, pai-chiang-ts'ao. The prescription for the yin-ch'en-chih-tzu-t'ang used by the Lu-ta Sino-Soviet Friendship Hospital is: yin-ch'en, chih-tzu, yu-chin, huang-po, lu-kang, and i-mi. The prescription used by the Hupeh Medical Academy is: yin-ch'en, chih-tzu, tse-hsieh, pei-shu, chu-ch'in, fu-ch'in, hua-shih, huang-po, kan-ts'ao, t'ung-ts'ao, and teng-ts'ao. This is only a part of the drugs commonly used in various places, and since the principles of treatment are the same, the results obtained are also the same.

It must be pointed out that the factors involved in therapeutic efficacy is not purely a question of drugs, for the key to the matter is the dialectical treatment based on the circumstances of the disease. In definite basic prescriptions it is very important to deal with each according to the principle of increase or decrease depending on the symptoms, and on the basis of the appearance of symptoms in each case. Consequently, Chinese methods of treatment can further shorten the period of treatment and increase the therapeutic efficacy.

## II. Infectious Hepatitis Without Jaundice

In regions where infectious hepatitis is prevalent, it has been found from investigations that the non-jaundice type is in the majority. In one report, the ratio of jaundice to non-jaundice was 1:24.

On the basis of research on all its aspects, and as seen from its clinical course and pathology, it can be considered to be a comparatively mild form of infectious hepatitis. The major clinical symptoms are fatigue, reduction of appetite, and pain in the region of the liver. The prognosis is generally excellent. In a clinical analysis of 353 treated cases conducted at a certain hospital, the symptoms, beginning with the onset of the disease, were classified in four categories, cold, gastro-intestinal, nervous, and anesthesia.

While the present data from research on infectious hepatitis without jaundice are not abundant, the following points may be concluded from current data:

1. Although no symptoms of jaundice appear in this type of infectious hepatitis, as seen from its etiology and pathology, it belongs in the jaundice category. Chang Chung-ching in discussing jaundice,

says, "In Yang-ning sickness, the pulse is slow, and it is difficult to eat to satiation. When the afflicted does eat to the full, and has annoyances, dizziness and difficulty in urination, then this indicates the onset of jaundice (ku-tan)...there are chills and fever, and poor appetite. After eating, dizziness ensues, and the heart is not quiet, and in time one becomes yellow. This is ku-tan." The phrases "this indicates the onset of ku-tan," and "in time one becomes yellow. This is ku-tan," explain that in certain stages of jaundice a jaundice does not necessarily appear, and moreover, as seen from the clinical phenomena of ku-tan, its symptoms tally with those of infectious hepatitis without jaundice. Consequently, we can discuss its treatment as a type of jaundice.

2. As seen from its clinical analysis of fever, coughing, arthralgia (Cold type), anorexia, nausea and vomiting, abdominal distension, diarrhea (gastro-intestinal), fatigue, headache, exhaustion (nervous), liver enlargement, pressure pains, and shooting pains (involuntary), it can be said that it is a disease produced from damp heat and depression.

3. Since the major causes of infectious hepatitis are related to damp heat, and the method of treatment relates to the liver and stomach, the treatment therefore can be based on Chang Chung-ching's principle of "regulate the liver, and make firm the stomach," and from his discussion of the symptoms and treatment of jaundice inquire into methods for treating all types of infectious hepatitis.

4. It is generally recognized that infectious hepatitis without jaundice is caused from damp heat and liver stoppage (kan-yu?). The shu-kan k'ai-yu, alleviate damp heat, and adjust the stomach methods are effective.

The Suchow City Chinese Medical Hospital gives attention to early diagnosis and treatment. They have shown that if it is not treated in time the fever increases and jaundice develops. If it is treated early with fang-hsiang to tone up the stomach, and k'u-sao-hua-shih, the symptoms are dissipated, and no jaundice develops. At the same time they have come to realize that the majority of patients in the first stage of the disease consider it to be merely a common cold and do not seek treatment until after the jaundice appears. Since the early cases are especially difficult to diagnose, the confirmation of the effectiveness of early treatments awaits the assistance of scientific diagnosis. The question of early diagnosis and differential diagnosis of infectious hepatitis is an important task of our current research.

In regard to the treatment of infectious hepatitis without jaundice, on the basis of present data, the effectiveness of traditional Chinese drugs appears evident.

The Ch'ang-ch'un Medical School used kan-yen-t'ang (a prescription compounded of 13 Chinese drugs, including huang-lien, chia-chu, t'ao-jen, hung-hua, tang-kuei, and yin-hua) to treat 40 cases of infectious hepatitis without jaundice. After the use of the drugs, liver pain quickly disappeared, appetite returned, liver swelling gradually decreased, and liver function was seen to improve. Not one case



developed unfavorable reactions. Yin-ch'en-hao-t'ang and ch'ing-kan-yin were also clearly effective.

Certain hospitals, in addition to using such basic methods as giving high sugar and high protein diets, yeast, vitamins, and suitable rest, used principally traditional Chinese methods of treatment. The commonly used prescriptions and drugs are ch'ai-ch'in-t'ang, ch'ing-kan-san, hsiao-yao-san, tan-san. All were definitely effective. As seen from clinical observations on 45 cases, using ch'ing-kan-san, it had a definite action in alleviating symptoms, and in reducing liver size. (Ch'ing-kan-san is compounded from chih-shih, yu-chin, tang-kuei, yin-ch'en, pai-chiang-ts'ao, and chu-tan-chih or niu-tan-chih).

Aside from this, the Hunan Medical School, the Ch'ang-ch'un Medical School, and the 4th Military Medical College have used acupuncture-moxibustion. The experiments have confirmed that this method is clearly effective in removing such symptoms as liver enlargement and anorexia.

### III. Acupuncture-Moxibustion

The therapeutic efficacy of acupuncture-moxibustion in both infectious hepatitis with and without jaundice is quite evident.

According to a report from the Canton Childrens' Hospital, with the use of acupuncture-moxibustion in treating 29 cases of infectious hepatitis with jaundice, the majority of cases were cured within a course of 15 to 20 treatments. In the most rapid of these, liver function had already returned to normal after four treatments. The average period of treatment was 15 days, and the jaundice disappeared on an average of 7.7 days. With no more than eight acupuncture treatments the jaundice disappeared in 16 cases. In the four most rapid cases, only three treatments were needed. Liver pain vanished on the average in two days, and liver shrinkage in 7.3 days. The major sites were the kan-yu, tan-yu, tsu-san-li, nei-kuang, p'i-yu, and nei-t'ing.

On the basis of experiences from all regions, the commonly used sites and techniques in acupuncture treatment of infectious hepatitis are as follows:

1. Liver pain: Major sites -- shih-tou, and kan-yu. Supplementary sites -- t'ai-chung, jih-yueh, ch'i-men, and chang-men. Techniques -- Needle left in 15 to 20 minutes. Pressure method (i-chih shou-fa).

2. Abdominal distension: Major sites -- tsu-san-li. Supplementary -- wei-ts'ang, chung-kuan, hun-men. Technique -- twist the needle in and out, letting it remain for 15 to 20 minutes. Every three to five minute interval, increase the stimulus once. After removing the needle, use moxa punk for two to three Ts'ung-chiu /onion cauterizations ?/.

3. Anorexia: The site used is the tsu-san-li and the technique employed is the same as above.

4. Hsu-kung: Major site -- tsu-san-li. Supplementary sites -- wei-ts'ang, chung-kuang, and nei-t'ing. Pressure technique is used.

5. Ch'ang-ming: Tsu-san-li site. Supplementary site -- nei-t'ing and chung-kuan.

6. Diarrhea: Sites with cauterization -- shen-ch'ueh, using moxa

punk with onion leaf, cauterize three to five chuang [?] . Acupuncture sites selected are shui-fen, san-yin-chiao. Supplementary sites -- tsu-san-li. The pressure technique is used.

7. Insomnia resulting from indigestion and liver pain: Sites -- ta-ling, shen-men, t'ai-yuan, tsu-san-li, t'ai-chung, hoeku, and san-yin-chiao. Techniques -- two-three sites are selected for each treatment, and in general the pressure technique is used with the needle left in 15 to 20 minutes.

According to clinical observations, acupuncture-moxibustion has been very effective in treating infectious hepatitis. The results have been clearly effective in such aspects as liver pain, the disappearance of gastro-intestinal symptoms, and the recovery of appetite. With the coordinated use of drugs, the course of treatment can be further shortened. These methods of treatment are certainly worthy of our respect and promulgation.

#### IV. Treatment with Popular Drugs

Popular drugs like chi-ku-ts'ao have been in general use and have been known definitely to be effective in treatment. The Nan-ning Workers' Hospital in Kwangsi's T'ung-tsu Autonomous District has begun to use chi-ku-ts'ao in treating infectious hepatitis, and it has been very effective in 44 cases observed. It is especially rapid in bringing about the disappearance of such symptoms as fever, abdominal distension, poor appetite, subcostal pain, and body fatigue. The fastest the symptoms disappeared was three days, and at the slowest in 14 days. It was seven days on the average. Jaundice disappeared in an average of 15 days. Recovery of liver function occurred in an average of 21 days. Liver enlargement returned to normal as function returned to normal. No unfavorable reactions were seen during the course of treatment. According to the results observed, it was more effective in children than in adults. The 4th Military Medical College used Chi-ku-ts'ao to treat 38 cases of infectious hepatitis without jaundice with results effective in 29 cases. In 36 cases liver size returned to normal and there was an evident improvement in the symptoms.

Yin-ch'en-hao decoction: The use of an oral yin-ch'en-hao decoction alone at the Second Chinese Hospital in Chungking had definitely effective results. Later, oil of yin-ch'en was used to make emulsions and pills, and these had a more rapid effect on disappearance of symptoms than did the decoction. In the epidemic season, the use of a yin-ch'en-hao decoction in a tea drink has had a definite protective action in experiments in Chungking and Shensi.

#### V. Conclusion

The above summary provides only a general introduction to research on the treatment of infectious hepatitis with traditional Chinese medical methods. It can be seen that Chinese methods of treating infectious hepatitis are many, inexpensive, and possess the superior characteristics of having rapid and effective results as well. Since infectious hepatitis

is a disease of the summer season and may take various forms such as chronic, acute, jaundice, and non-jaundice, our pressing problem at present is to proceed with research related to its classification and early diagnosis. At this time there are difficulties in both Chinese and Western medicine in the differential diagnosis of infectious hepatitis. We must work together in seeking a solution. In this way the elevation of therapeutic effectiveness will be aided. Under the leadership of the party, and with the co-operation of Chinese and Western medicine we can expect to make further contributions to this aspect and obtain even greater accomplishments.

Research Institutes of Traditional Chinese Medicine

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## TRADITIONAL MEDICAL RESEARCH ON TREATMENT OF FISSURATED ULCER OF CERVIX UTERI

Following is a translation of an article by Chang Hsi-yueh (張希月) et al, in Ch'ing-chu Chien-kuo Shih-chou-nien I-hsueh K'o-hsueh Ch'eng-chiu Lun-wen Chi, Volume, I, Peiping, December, 1959, pp 353-357.

### INTRODUCTION

Fissurated ulcer of the cervix is a frequently seen gynecological disease, and in the past it was known not to be uncommon to occur in women following their marriage. Since the symptoms are not obvious and its effects on health are small, it has often gone without treatment.

After the Liberation, under the leadership of the Party and of the Peoples Government, health protection work for the people and especially for women has been considered very important. Cervical ulcer is one of the forerunners of cancer of the cervix, and as "prevention" is the general goal of medical hygiene work, the work of treating and preventing cervical ulcer, has great significance in the early diagnosis and treatment of cancer of the cervix.

In 1958 a general examination was made of all married women between the ages of 18-45 in Shanghai. Of 117,680 women examined, 42,979, or 36.52% were suffering from cervical ulcer.

All of these had to be treated. Therefore, we needed a new, quick, and economical method that would meet the peoples' needs. Consequently we sought new methods from our storehouse of traditional Chinese medicinal drugs. More than a year of clinical observations and research were carried out. We already have many types of Chinese drugs that are definitely effective in treating cervical ulcer. Among these, chin-yin-hua [Lonicera japonica Thunb.] preparations and Wang Chih-min's (王志明) uterine pellets are most clearly effective and are in widest use.

### Chin-yin-hua Preparation

Of chin-yin-hua preparations currently in use, there are three types: 1. chin-yin-hua paste (liu-chin-kao), 2. chin-yin-hua powder, and 3. chin-yin-hua gelatin.

The chin-yin-hua preparations in broth infusions were used to

make culture media of varying degrees of concentration. After determining the bacteriocidal level, it was inoculated with *Staphylococcus aureus*, streptococci, and *Escherichia coli*. This was incubated at 37 degrees Centigrade for 48 hours. The results observed can be seen in Table 1.

It can be seen from the table below that chin-yin-hua has a definite bacteriocidal activity.

Table 1.

Concentration	100%	50%	20%	10%	5%	1%	Control
Bacteria							
<i>Staphylococcus aureus</i>	-	-	-	-	+	+	+
Streptococci	-	-	-	-	+	+	+
<i>Escherichia Coli</i>	-	-	-	-	+	+	+

#### Wang Chih-min's Uterine Pellet

Wang Chih-min's uterine pellet was a secret prescription of the Chinese doctor, Wang Chih-min, in which 13 herbs were used to compound a pill. It can be used in many kinds of gynecological maladies, one of which is cervical ulcer.

A broth of Wang Chih-min's uterine pellet was used to make culture media of varying degrees of concentration, inoculated with *Staphylococcus aureus*, Streptococci, and *Escherichia coli*, and incubated at 37 degrees Centigrade for 48 hours. The results are seen in Table 2.

Table 2.

Concentration	100%	50%	20%	10%	5%	1%	Control
Bacteria							
<i>Staphylococcus aureus</i>	-	-	-	-	+	+	+
Streptococci	-	-	-	-	-	-	+
<i>Escherichia coli</i>	-	-	-	-	-	-	+

As can be seen from the above table, the effects of Wang Chih-min's uterine pellets are stronger on Streptococci and *Escherichia coli* than

on Staphylococcus aureus.

### Clinical Observations and Analysis

According to the degree of cervical ulceration, fissurated ulcer of the cervix may be divided into three classes. In the mild form, the ulceration occupies up to a third of the area of the cervix; in the intermediate form, it occupies one-half to one-third of the area, and in the severe form, one-half or more of the area.

We will also discuss the results of treatment according to this formula for classification. A cure is indicated by the growing together of the cervical epithelium and its surface becoming entirely smooth. Improvement is indicated by epithelial growth, growth and infiltration of blood vessels, gradual reduction of congestion, and a gradual return of the ulcerated surface to normal. No effect is indicated by lack of any change following treatment.

Since the beginning of 1957, the Sixth Hospital in Shanghai has used chin-yin-hua preparations to treat 312 cases, and Wang Chih-min's uterine pellet to treat 747 cases. The methods of treatment, processes, and therapeutic effectiveness are related below.

#### 1. Chin-yin-hua Preparations:

##### (a). Chin-yin-hua paste (liu-chin-kao):

Method of treatment -- Treatment is begun after the menses.

Before applying the drug, the cervix and any mucus in the cervix and cervical canal should be cleaned with a gauze or cotton swab. If it should be difficult to remove, a 4% soda water may be used to wash it. After washing, use a gauze swab to dry the cervix and vaginal wall, so that the ulcerated surface will stand out clearly. After this, use cotton soaked in chin-yin-hua paste, rubbing it in thoroughly on the cervix and cervical canal until it appears brown. The paste should be evenly distributed over the cervix. This should be applied once a day with a total of ten treatments. After two to three days of treatment growth of epithelium and infiltration of blood vessels can be seen about the periphery of the ulcerated area. During the course of the treatment, there may be an increase in vaginal excreta as a reaction to the astringent action of chin-yin-hua on the ulcerated surface. This is nothing to be concerned about.

The Department of Obstetrics and Gynecology of the Shanghai First Medical School and the Shanghai First Municipal Mother-Child Health Hospital used chin-yin-hua paste to treat 200 cases of fissurated ulcer of the cervix. The results may be seen in Table 3:

Table 3.

Effectiveness of Treatment	Cured			Improved			No Effect			Total
	M	I	S	M	I	S	M	I	S	
Unit										
Dpt.Ob-Gyn Shanghai Med.Sch.	5	4	2	34	33	9	3	4	6	100
Mun. Hospital	30	3	0	38	14	0	7	6	2	100
Total	35	7	2	72	47	9	10	10	8	200
% of Total	22%			64%			14%			100%

As can be seen from the preceding table, it was 86% effective, and more effective in the mild and intermediary forms of ulcerations.

In some other hospitals the effectiveness is comparatively lower, at 64.66%. This may be due to differences in the method of application. Therefore, before application the cervix and intra-cervical mucus must definitely be washed clean. The application must be forceful with sufficient frequency to cause the drug to penetrate the tissue. If it is not done in this way, it may lower the effectiveness of the treatment.

(b) Chin-yin-hua Powder:

Method of treatment -- treatment is begun after the menses. Wash the vagina and cervix as in the previous method. Use an atomizer to spray the chin-yin-hua powder preparation on the surface of the cervix. This should be done once a day for a total of ten days. The Shanghai First Peoples Hospital treated 62 cases. The results are seen in Table 4.

Table 4.

Effectiveness of Treatment	Cured			Improved			No Effect			Total
	M	I	S	M	I	S	M	I	S	
No. of Cases	7	16	2	10	13	4	4	3	3	62
Percent Effective	40.32			43.54			16.14			100

It is 83.86% effective. Among the 62 cases there was only one who was hypersensitive to chin-yin-hua, with resulting vaginal congestion, swelling and pain. After removing the medication, the symptoms disappeared.

(c) Chin-yin-hua Gelatin.

Method of Treatment: Wash the vagina and cervix. First spread chin-yin-hua paste on the cervix. Then apply suitable sized grain of chin-yin-hua gelatin to the cervix, fixing it in place with a roll of cotton swabbing. After 24 hours the patient herself may remove the cotton. Every three days a new grain is inserted for a total of five treatments. The Shanghai First Mother-Child Health Hospital has already treated 50 cases in this manner. The results are seen in Table 5:

Table 5.

Efficacy of Treatment	Cured	Improved	No Effect	Total
Number of Cases	2	44	4	50
Percent Effective	4	88	8	100

It was 92% effective, although the rate of complete cure is low. This may be due to an insufficient number of treatments. The effectiveness could probably be increased using a total of ten treatments.

## 2. Wang Chih-min's Uterine Pellet.

Method of treatment -- treatment is begun after the menses. The cervix and vagina are first washed, then one Wang Chih-min uterine pellet is affixed to the surface of the cervix and held in place with a roll of cotton swab. After 24 hours the patient herself may remove the cotton swab, i.e. after first greasing the vaginal orifice. After removing the cotton swab, the external genitalia should be washed with warm water to avoid discomfort that might result from penetration of the drug. Intercourse should be abstained from during the period the drug is in use in order to avoid effects on the male genitalia. Do not use the drug during the menses. Use the drug once a week for a total of four treatments.

After using the drug some patients may experience vaginal distension and discomfort in the lumbar region. This will disappear in a very short time. Leucorrhoea may also increase. This is due to the corrosive action of the drug which causes a corrosion of the ulcerated tissue. This is removed and mixes with the drug to form a mucous-like fluid which is excreted by way of the vagina.

In two to three days after using the drug, the vaginal mucosa and cervical epithelium turn white, and become wrinkled. After this it becomes either wholly or partially detached. The detached vaginal epithelium appears tubular, and that from the cervix as disintegrated ulceration tissue. The detached epithelium, under the microscope, is seen to be cornified epithelium, fibrous tissue, and inflamed cells.

From June, 1958 Wang Chih-min's uterine pellet has been used to treat 747 cases of fissurated ulcer of the cervix in six Shanghai hospitals. The results are seen in Table 6. It was 83.53% effective. (See Table 6 at end of report).

The Shanghai Municipal First Peoples Hospital has used sulfonamides and cod liver oil applications in conjunction with Wang Chih-min's uterine pellet, treating 14 cases ten times with nine cured and five improved. However, since the number of cases is so small it is difficult to draw any conclusions. Further research and observations will be required.

In the past ten years there has been much literature concerning the many methods of treatment for fissurated ulcer of the cervix. Their effectiveness varies, as can be seen from the following table: (See Table 7 at end of report).

## DISCUSSION

As seen from Table 7, electrocautery is one of the most effective treatments for fissurated ulcer of the cervix. However, a definite equipment and technical levels are required, and at present there are still difficulties prohibiting its general use. Chin-yin-hua preparations and Wang Chih-min's uterine pellet, although not as effective in treatment as electrocautery, are abundantly produced, and the method is simple and easy to carry out. All that is needed are personnel with an elementary or intermediate knowledge of nursing. It can be used at any time and place. These two drugs are quick and economical and have come into general use.

The results of acupuncture treatment are also very good, reaching



93.8% effectiveness. However, its use is not common, and further careful research is required.

After the second day of using Wang Chih-min's uterine pellet, there occurs a desquamation of vaginal tissue, which when seen under the microscope, consists of cornified epithelium, a small number of inflamed cells, and, on occasion, myofibrillar tissue. From this it can be inferred that the mechanism of treatment of Wang Chih-min's uterine pellet and of electro-cautery are similar, as in the latter local cauterization of inflamed tissue is used to produce its necrosis and detachment. With the re-growth of basal tissue, the object of the treatment is attained. Among the drugs used to compound Wang Chih-min's uterine pellet there are many which possess corrosive action, or can be used to bring about the corrosion and sloughing off of the vaginal and cervical epithelium so that the basal tissue may re-grow. The epithelium of the vaginal wall is normal at the outset, but detachment of the tissue occurs after use of the drug. However, as the ulcerated surface has already been damaged, i.e., after using the drug, the corrosion and sloughing off occur sooner. Consequently, the desquamated vaginal epithelium often appears tubular, and there is no further increase in cervical desquamated epithelium. Since the outer layer is sloughed off, the inner layer grows quickly. Therefore, there is no hemorrhaging or damage to the vaginal wall, although in three cases there were moderate vaginal bleedings following the use of Wang Chih-min's uterine pellets. There was also bleeding from the newly produced cervical tissue. The desquamata, as seen under the microscope, consisted largely of cornified epithelium with little corroded tissue. If the inflammation was quite serious or had penetrated to the muscle layer, there was no evident effectiveness in the treatment. This agrees with clinical observations. This is the factor involved in the low effectiveness of treatment in severe cases. The future direction of our work will be to find new and effective methods of treating the disease. There are many corrosive drugs in use to treat fissured ulcer of the cervix, but they should be applied to the normal vaginal wall with caution, because they can lead to tissue necrosis and ulcerative scars, and also produced narrowing of the vagina. However, after using Wang Chih-min's uterine pellet in several thousand cases in Shanghai and other cities, there was not one case of serious vaginal damage. This is something that cannot be said for other drugs used in treating the disease, again confirming the abundance of the treasure of our traditional medicine.

Another problem requiring resolution is that of firmly fixing Wang Chih-min's uterine pellet to the cervix. The present cotton plug method is not ideal. On occasion the pellet may slip into the uterus. What is needed are cervical plugs that can be constructed for cervixes of different sizes, and which will fill the cervical canal as well as cover the cervix itself, and which, in addition, result in the drug's corrosion only of inflamed tissue of the cervix and not of the normal vaginal epithelium.

As regards the course of treatment with Wang Chih-min's uterine pellet, originally it was set at four treatments. On the basis of the analysis and clinical observations of 747 cases, an average of 4.53 applications were required. Consequently, if the course of treatment

is changed to five times, there will be effective results. In the future it will be possible to complete the course of treatment within the period of one menstrual cycle by using five treatments at intervals of five days.

As the number of cases treated by the above two drugs are few and have not been sufficiently followed up, the questions of recurrence and long term effectiveness still await further research.

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Chiang Ti-hsien  
Hu Chih-yuan

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TABLE 6

Effectiveness of Treatment	<u>Cured</u>						<u>Improved</u>			<u>No Effect</u>		
	<u>M</u>		<u>I</u>	<u>S</u>	<u>M</u>	<u>I</u>	<u>S</u>	<u>M</u>	<u>I</u>	<u>S</u>	<u>Total</u>	
Unit												
Shanghai Electrical Industries Hosp.	94	65	35	13	27	17	3	6	3	3	263	
Internat. Peace Health Hosp.	15	2	0	39	91	12	5	1	19	5	184	
Munic. 6th Peoples' Hosp.	21	5	0	25	34	5	16	18	23	16	147	
Munic. 1st Mom. Chld. Hosp.	0	5	0	11	26	23	1	2	8	1	56	
Dpt. Ob-Gyn, Shanghai 1st Med. Sch.	0	5	6	8	31	3	3	2	8	3	66	
Shanghai Munic. 1st Peoples' Hosp.	0	4	0	4	16	2	4	0	1	4	31	
Total	130	86	41	100	225	42	62	29	62	32	747	
Percentage of Total	17.4	11.5	5.5	13.39	30.12	5.62	8.31	3.88	8.31	4.28	100	
Percent Effective	34.40			49.13			16.47					

TABLE 7

Method of Treatment	Number Treated	Cured %	Improved %	No Effect %	Percent Effective
Electrocautery	100	96.0		0	96
Acupuncture	131	51.9	41.9	6.2	93.8
Histological Therapy	115	26.9	62.6	10.4	86.5
Chin-yin-hua Gelatin	50	4.0	88.0	8.0	92
Chin-yin-hua Paste	200	22.0	64.0	14.0	86
Chin-yin-hua Powder	62	40.32	43.54	16.14	83.86
Wang Chih-min's Pellet	747	34.4	49.0	16.5	83.4
Huang-chü-hua Paste	81	16.0	66.6	17.2	82.6
Sulfonamides and Cod Liver Oil	108	76.0		24.0	76
Penicillin novocaine	100	26.6	46.8	26.6	73.4

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## TRADITIONAL MEDICAL RESEARCH ON TREATMENT OF HEMORRHOIDS AND ANAL FISTULAE

Following is a translation of an article by the Research Institutes of Traditional Chinese Medicine, in Ch'ing-chu Chien-kuo Shih-chou-nien I-hsueh K'o-hsueh Ch'eng-chiu Lun-wen Chi, Vol. 1, Peiping, December 1959, pp 357-360./

Hemorrhoids and anal fistulae are common maladies. There are very early records of their treatment in traditional Chinese medical documents. These cover a long period of practice and contain abundant experiences. However, they were not respected in the Old Society and were neither developed nor promulgated. Since the establishment of the Chinese Peoples Republic and under the glorious light of the Party's Chinese medical policy, this branch of study has been thoroughly developed, and has made very great accomplishments.

Traditional Chinese medical methods of treating this disorder are many and varied. The commonly used and widespread methods are the drying method (k'u-chih-fa), the thread method (kua-hsien-fa), the knot removal method (chieh-cha-fa), and the pressure removal method (ya-cha-fa).

In 1952, the First Chinese Medical Hospital of Chungking gained experience in the use of the drying and thread methods. In 1954, the Ministry of Health selected a task force to come to Peiping to share and further their experiences. Up until the present these methods of treatment have come into widespread use throughout the country, and owing to their clear effectiveness, have been accepted by the masses. At the same time, they have been continually improved upon their former level.

### I. Drying Method (K'u-chih-fa)

This method is one in which hemorrhoid drying powder (k'u-chih-san) is applied to the surface of the hemorrhoid's inner core (epithelium of mucus membrane) to induce drying and necrosis, so that it sloughs off which brings about a cure. After the scab has come off, the remaining mucus membrane ulceration usually heals of its own accord. However, an astringent drug paste may also be applied to bring about the healing. This method of treatment is suitable for use in external hemorrhoids, deep internal hemorrhoids, mucous membrane fistulae, in anemia resulting from hemorrhagic internal hemorrhoids, and for older people and those with high blood pressure.

In short, the outstanding characteristic of this treatment is that it is not only adapted to surgical treatment, but it may also be used in

cases where surgery is contra-indicated. Consequently, positive treatment can be employed and mild but ineffective treatments avoided. At the same time, it is simple, effective and recurrence is rare. The method is excellent in treating such aftereffects and adaptations as rectal constriction.

The First Chinese Medical Hospital of Chungking used k'u-chih-san to treat 450 cases, healing all of these. The Shanghai Public 5th Out Clinic healed 207 cases with one recurrence. The Chinese Medical Hospital of Kiangsu Province used k'u-chih-san to treat 181 cases of internal hemorrhoid, and found that the drying took an average of 5.7 days, the sloughing off an average of 6.7 days, and the healing of the injured surface another six days, making a total course of treatment of 18.4 days.

Although k'u-chih-san is highly effective, it possesses definite short-comings, such as producing local irritation and swelling. Since it contains arsenic trioxide it may lead to a toxic reaction in some cases. According to statistics from Chungking and the Peiping Central 6th Hospital, symptoms of varying degrees of toxicosis occurred in 3% of the cases.

Consequently, in order to solve the problems of irritation and toxicosis, medical organizations in various regions have adopted many improved methods. In 1956, the Hemorrhoid and Anal Fistula Group of the Research Institutes for Chinese Traditional Medicine adopted a non-arsenical k'u-chih pellet, and in clinical observations on more than 200 cases found it to be effective in a large majority of them. It was only necessary to apply the drug once, and generally within about a week, necrosis, sloughing off, and healing took place. At the same time, the technique is simple, there is little pain, and only swelling. Therefore, it can be widely used in clinics. There were, however, five cases of massive hemorrhage resulting from lack of caution in the operation. These were cured by first aid.

The First Chinese Medical Hospital in Chungking, on the basis of the original drying treatment, experimented on a number of improved measures. In June, 1955, they began animal experiments. They obtained clearly effective results by first injecting calcium chloride subcutaneously, and then applying k'u-chih-san. After a half-year of observation, it was tried experimentally on humans at the end of December. Under conditions of close observation, and on the basis of results seen in 146 cases, it was extremely satisfactory. However, according to previous literature, infections develop easily after calcium chloride has come into contact with tissue. Nevertheless, in the 146 experimentally treated cases, there were no instances of infections developing as a result of calcium chloride injection. On the basis of their research, they found that local acidity increased, following tissue necrosis, and that after local calcium chloride injection, the amount of chlorine ions increased, thereby further increasing local acidity. The further use of k'u-chih-san locally can avoid the development of infection. In order to prevent possible infection, local disinfectants and analgesics were increased. At the above hospital, in a 10% solution of calcium chloride, 0.1-0.2 milliliter of carbolic acid (it is both disinfectant and analgesic) were added

per ten milliliter of solution; and 200 milligrams of novocaine powder (local analgesic). Sometimes a few drops of epinephrine (causing local vaso-constriction and prolongation of local drug action) may be added. It may be injected after shaking. On the basis of six months of clinical observations, no instances of toxicosis during the initial period, nor of irritation and later rectal constriction were discovered. This improved method not only makes use of k'u-chih-san's superior characteristics, but also serves to further promote its advancement.

The Department of Surgery of Shanghai Chinese Medical School's 11th Peoples Hospital has also made advancement based on the "improved k'u-chih-san treatment" of Chungking 1st Chinese Medical Hospital. From November, 1956 through December, 1957, they made clinical observations on 231 treated cases of internal hemorrhoid, finding that, in the majority of cases, the sloughing off occurred within four to seven days after the drying of the hemorrhoid. The period required for the healing of the sore (the stage after necrosis and sloughing off, and until healing) was six to ten days on the average. Reactions to the treatment were extremely mild when compared to those cases when k'u-chih-san was formerly used alone. In this aspect of improving treatment methods, workers in other areas have exercised similar effort and have obtained very effective results.

K'u-chih-ting is another type of hemorrhoid drying method developed on the basis of k'u-chih-san. It is adaptable to all stages of internal hemorrhoid, and is not contra-indicated in anemia and pulmonary tuberculosis. It is a method in which k'u-chih-san is prepared in a needle-shaped suppository, attached to a hypodermic syringe, and directly injected into the core of the hemorrhoid. The size of the suppository is determined by the size of the hemorrhoid core. In general, after two to three days the hemorrhoid core tissue becomes necrotic. After six to eight days, it withers and falls off completely. According to the results of clinical observations on 1,200 cases in the Fukien Province Peoples Hospital, 97.8% of the cases were cured with only one to two drug applications with treatment period in general being within two weeks. There were no instances of such aftereffects as rectal constriction, loss of bowel control or mucus membrane desquamation. The Wu-han Workers' Hospital in observations on 541 cases, cured all of them, and with the exception of cases in which the hemorrhoids were exceptionally large or numerous, succeeded in healing them in general with one application of the drug and within one week.

Although during the course of k'u-chih-ting therapy the only adverse reaction is usually a mild degree of rectal swelling, there are a small minority of cases in which such reactions as fever and headache develop, and in individual cases, hemorrhage as well (e.g., among 1,200 cases treated in Fukien, after the use of the drug, there were seven cases of hemorrhage following bowel movement). These reactions are known to be definitely related to the arsenic content of k'u-chih-ting.

In order to solve the problem of toxic reaction, improvements have been made on the drying treatment in many regions. Among these, the most commonly used is the alum k'u-chih-ting. The adaptations and technique

involved with the alum k'u-chih-ting and the k'u-chih-san are basically similar. The Research Institutes of Traditional Chinese Medicine have utilized this technique in 30 cases, and the preliminary analysis indicates that they can be healed in one treatment, regardless of the size or number of the hemorrhoids. At the same time, since it does not contain arsenic, the arsenic induced reactions and adverse aftereffects may be avoided. In short, the drying method is clearly effective. However, since its use is limited to internal hemorrhoids, we must unceasingly continue our research and improvements.

## II. Pressure Removal Method (Ya-cha-fa)

The pressure removal method includes two aspects. This is the pressure removal of the hemorrhoid core, and the injection of drugs into the core, in order to bring about its rapid dessication. It may be used in all types of internal hemorrhoid, and is not contra-indicated in high blood pressure, liver and kidney diseases, and pulmonary tuberculosis.

The pressure removal method was, in general, developed from two techniques, both of which are of equal importance and which cannot be used at the expense of the other. Actual practice confirms this point. For example, the Suchow Chinese Medical Hospital, when it used only the compression method in treating 100 cases, found that although all were cured there were varying degrees of aching in 65% of the cases. In addition, there was one case in which severe hemorrhage occurred, and a second operation was necessary. It is difficult to control the quantity of fluid injected in a given area using drug injections only, and thus difficult to bring about necrosis of all the hemorrhoid cores. Another point is, that by using only the compression removal method, necrosis of the hemorrhoid core proceeds slowly. After the removal, the core and normal tissue still maintain partial blood vessel and nerve connections, and rectal contamination may readily occur. Consequently, there often is an appearance of swelling and of pain. Therefore, the combined use of these two methods, which each make up for the others shortcomings, is superior.

## III. Traditional Chinese Surgical and Other Methods of Treatment

After the Liberation, Chinese and Western medicine have been united, and the use of local anesthetics and strict disinfection have resulted in the further development of the effectiveness of traditional Chinese surgical treatments for hemorrhoid. The Shantung Provincial Chinese Medical Hospital have used surgical methods to treat all types of internal and external hemorrhoid, and have completely cured 531 cases. On the basis of patient reactions, surgical treatment is less painful and simpler than other methods, and there is no post surgical swelling. The Fukien Province Peoples Hospital used hemorrhoidectomy in treating 76 cases of hemorrhagic external hemorrhoid with an average treatment period of 4.4 days.

The Shantung Provincial Chinese Medical Hospital have surgically removed anal fistulae and complications for 238 cases and used post-surgical acupuncture-moxibustion and oral drugs. With the exception of one



case, the cure rate was 99.6%. This shows that traditional Chinese surgical treatment can also produce effective results.

#### IV. Wire Method of Treatment (Kua-hsien-fa)

This is the traditional Chinese method of treating anal fistulae. A "drug wire" (yao-hsien ?) or "india-rubber wire" (hsiang-p'i-hsien ?) is inserted in the canal, and relying on the contractile power of the wire, the canal is gradually cut out. With this method, regardless of whether it is a simple, complicated, swollen, or tuberculous fistulae, satisfactorily effective results can be attained. During the treatment period, it is not necessary to remain hospitalized, and the recurrence rate is low. If the wire is applied to the entire area of the inner and outer opening of the fistula, it cannot recur. Aside from this, the technique is simple, and there are no aftereffects. This is the superior point of this method. According to reports from all hospitals, the rate of cure is above 99%. The Research Institutes of Traditional Chinese Medicine used this method to treat 546 cases, curing all without recurrence or without aftereffects. The First Chinese Medical Hospital of Chungking treated 1,348 cases with a cure rate of 99.3%. The Heilungkiang Province Bureau of Health reported that 267 cases treated with the kua-hsien method were cured without recurrence or aftereffects. In the majority of cases the treatment period was 11-24 days.

To summarize the above, since traditional Chinese medicine has many kinds of effective treatments for hemorrhoid and anal fistula, these can be adapted for use in all types of the ailment. Clinical practice in recent years has confirmed the fact that with a co-ordinated use of all types of treatment methods, it is then possible to deal with hemorrhoid and anal fistula even more effectively. For example, in internal hemorrhoids which have not been removed for two or three months, the alum spike and pressure removal method is most ideal. However, if the internal hemorrhoid has been removed and its area is not great, but its base not even, then the pressure removal method is suitable. If the hemorrhoid has been removed and there is a creviced surface of inflammation and ulceration, there is no more satisfactory or thorough a method than k'u-chih-san. According to general reports, a co-ordinated application is also required in anal fistula. If the fistula is simple and superficial, it may be excised. If it is deep, the kua-hsien method is most satisfactory, while in complex rectal fistulae with external opening, the external opening and fistula is cut out, kua-hsien being used for the inner opening and fistula. Since all varieties of differing situations may be met with in the treatment of hemorrhoid and anal fistula, the active co-ordination of all treatment methods can produce effective results.

Since the Establishment of the nation, traditional Chinese methods for treating hemorrhoid and anal fistula have been greatly developed, and proceeding from the original basis, we have gradually overcome such shortcomings as toxic reaction, post-surgical hemorrhage and aching. Although these problems have not yet been thoroughly solved, the experience acquired in recent years throughout the nation has confirmed the definite superiority

of traditional Chinese treatment of hemorrhoid and anal fistula. At the same time, in terms of expense, time necessary for treatment and surgical complications, it is superior to commonly used surgical methods, and fits the demands of the broad masses. Naturally, we do not rest satisfied with this, but are unceasingly advancing and improving. We believe, that with the cooperation of Chinese and Western medicine, this type of treatment may be made even more perfect.

Research Institutes of Chinese Traditional Medicine

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## TRADITIONAL MEDICAL RESEARCH ON TREATMENT OF BONE FRACTURES AND DISLOCATED JOINTS

Following is a translation of an article by the Research Institutes of Chinese Traditional Medicine, in Ch'ing-chu Chien-kuo Shih-chou-nien I-hsueh K'o-hsueh Ch'eng-chiu Lun-wen Chi, Volume 1, Peiping, December 1959, pp 360-365/

Chinese traditional medicine has had abundant experience in the diagnosis and treatment of fractures and dislocations, and a special branch of bone-setting, sometimes called shang-k'o, has gradually developed and become an important part of our national medicine. After the Liberation, under the leadership of the Party and of the Peoples Government, we have delved into our traditional medical heritage, and throughout the nation developments have begun to be made in the work of bone setting. In all treatment and research facilities, Chinese traditional bone-setting physicians have been taken in to participate in the work, and in some regions bone-setting hospitals and Shang-k'o Research laboratories have been established. Under the co-operation of Western and Chinese Medicine, we have extended Chinese traditional methods of treating fractures and dislocations, and have raised their effectiveness. For the purposes of mutual study and exchange of experiences, a number of provincial and municipal groups have held conferences for the exchange of experiences with Chinese bone-setting techniques. Articles relating to bone-setting and case reports increase yearly. According to present data, only one book a year appeared during the years after the Liberation until 1954. Until 1958, more than 12 books had been published. Their content was also greatly elevated. In the field of books on the science of bone-setting, three have been published successively since 1958. For example, the Shantung Province School for the Advancement of Chinese Traditional Medicine, had made a systematic presentation of Chinese traditional bone-setting theory, methods of diagnosis and treatment, together with clinical experiences and case examples, while compiling a study on bone-setting. In addition, they also used a few modern medical techniques such as radiological examination. This reflects the new developments on the basis of former traditional bone-setting study, and is also an important fruit of the co-operation of Chinese and Western medicine.

### I. Methods of Diagnosis and Treatment of Fractures and Dislocations in Traditional Chinese Medicine

Chinese traditional medicine has a unique approach to fractures

and dislocations which has been developed on the basis of the traditional diagnostic methods of observation (wang), examination (wen<sup>2</sup>), and inquiry (wen<sup>4</sup>). By means of observation one may determine the general condition of the body, and local symptoms, such as limb deformity, locomotor hindrance, and swelling. By examination one can determine the general (hsu) and particular (shih) features of the injured bone and the state of the fracture. By inquiry, one can ascertain the possibility of fracture and dislocation. By feeling the pulse, its severity may be found, and by feeling and pressing of the damaged area, the type and extent of fracture or dislocation may be determined. Experienced bone-setting physicians can work out a correct diagnosis by means of a comprehensive application of these techniques.

Fractures may be classified according to their nature and degree. Under complete fractures, there are "severed" (chieh-tuan), "oblique" (hsieh-tuan), and "splinter" (sui-tuan). There are also incomplete and perforated fractures. Articular dislocation is classed "complete" or "semi." Treatment depends on the given situation.

In the treatment of fractures and dislocations, they must first be realigned. According to I-tsung Chin-chien, a Ch'ing Dynasty compilation on bone-setting methods, there are the following major methods of hand realignment.

1. Mo-fa: The injured area is felt lightly with the hand in order to determine the state of fracture or dislocation, any change in the shape of the limb, and from there proceed to treatment.

2. Chieh-fa: This consists of the joining together of the severed ends of bone.

3. Tuan-fa: This is a method of putting the severed ends of bone in proper position and for correction of dislocated joints.

4. T'i-fa: This is the drawing back of the position of bones displaced in the fracture to normal.

5. An-mo-fa: "An" is downward pressure of the hands, and "mo" is hand massage. The use of the two together can relax the flesh, activate the blood, disperse extravasated blood, reduce swelling, and lessen pain. It is often used for incomplete fractures and also used after the fracture is repaired.

6. T'ui-na-fa: T'ui is the pushing of the bone back into its original place, and "na" is the use of the hand to twist the damaged limb into normal position. T'ui-na also includes light massage of muscle or soft tissues, to expand blood vessels, tone up veins, and stimulate local blood circulation, in order to hasten the healing of the fracture.

These methods in clinical practice are applied together. For example, before joining the bone, one must use the mo-fa. At the time one is using the latter, the na-fa is also needed. Before using the Chieh or Tuan methods, the T'i method must be used with the T'i and Na methods used at the same time. After joining the ends, the mo technique should be used in examination, and finally, the An-mo and T'ui-na methods must be used. These methods are thus used together, and form the basic technique for the realignment of fractures and dislocated joints.

For certain fractures and dislocations there are special techniques. For example, in fracture of the vertebrae, there is the "p'an-so tieh-chuan cheng-fu-shu" (攀索透破整复术); and in dislocation of the shoulder, there is the "t'i-shang ch'ien-yin-fa" (梯上牵引法).

After the realignment of the fracture or dislocation must be fixed, the methods for fixing differ according to the kind and location of the injury. Apply various drugs, according to the severity of the injury before fixing. Use cotton and moxa punk, and proceed to fix after binding. In general, loosen the binding every two to five days in order to examine and change drugs. In general, soft and hard paper, bamboo or wood, is used for fixing. With these tools one can reach the objective of fixing the bone, and with the use of local drugs one can stimulate the successful healing of the injury.

Before aligning the fracture or dislocation, there are some who use a drug broth or hot water to cleanse the injured area, and some who first use the An-mo and T'ui-na methods, while others use acupuncture-moxibustion. These all result in harmony of ch'i and blood, the expansion of blood vessels, the dispersal of extravasated blood and the relaxation of muscles. Sometimes external or oral anesthetic drugs are needed to lessen the pain of setting. These methods are also convenient in treating dislocations. If the injured bone has pierced the skin, the wound should be cleansed to prevent infection.

Traditional Chinese medicine considers blood to travel in the blood vessels, while ch'i travels outside the blood vessels. If, as a result of injury, there is extravasated blood from the arteries and veins, the ch'i is hindered from moving; swelling and pain are produced. Therefore, the major aspect of the treatment is the removal of the extravasated blood in order to adjust the obstruction of the ch'i. Aside from locally applied drugs, oral drugs are also required to remove extravasated blood, activate the blood, reduce swelling, allay pain, vitalize the muscles, and knit the bones.

In the course of treating fractures and dislocations, the patient must be advised to avoid "wind" and "cold," regulate his eating and drinking; moreover see to it that the spirit is at ease, so that the patient will be happier.

What has been related above are the general principles of Chinese traditional treatment of fractures and dislocations.

## II. Clinical Effectiveness of Chinese Traditional Treatment for Fractures and Dislocations

In the last several years Chinese traditional bone-setting techniques have been used to treat all types of fractures and dislocations. Very great accomplishments have been attained, such as the removal of much of the pain from those suffering from fractures.

According to a report by the Lu-ta Health Bureau (1958), Dr. Mou Jen-hsien (牟仁先) diagnosed and treated 8,120 cases of fracture and dislocation from February 1955 until August 1958. From an analysis

of 1,947 closed fractures, it can be seen that the treatment was extremely effective. In 1,846 cases, or 95%, subjective symptoms vanished, the function of the injured area was completely restored, and there were no deformities. 90 cases, or 4.6%, retained mild functional hindrances, but the patients were able to return to work. In 11 cases or 0.4%, there were deformities and partial loss of function, necessitating a lighter type of work. The average period required for healing in adults was 27.1 days for upper limb fractures, and 32.8 days for lower limb fractures. These with upper limb fractures returned to work on the average in 59.8 days, those with lower limb fractures, in 70.2 days. These effective results are closely related to the use of traditional Chinese setting methods and k'u-chiu-kao fixing, enforced early leaving of the bed and early activity, together with the taking of oral drugs.

The Mukden City Bone-Setting Hospital has used Chinese and Western methods in clinical practice. They are also carrying on research work on the Chinese traditional bone-setting methods. The injuries were diagnosed, set, treated with drugs externally, bandaged and fixed, oral drugs given, and it is in this way that the patient recovered by following the experiences of Chinese traditional medicine. Western doctors made examinations, and in necessary cases used X-rays as an aid for setting, drawing of the skin, and a number of fixing amputations. Based on observations made on 344 cases of the 1,582 cases treated for closed fracture from February 1957 until June 1958, it was found that the therapeutic effectiveness was very high for fracture of the femur, fracture of the tibia and fibula together and fracture of the radius and ulna. On leaving the hospital, locomotor function had been recovered, the fracture firmly healed, and from 1/3 to 2/3 had no curvature or only mild curvature, and there was no pain. Treatment was 90.5% effective in fracture of the femur, 00.3% effective in fracture of the tibia and fibula, and 93.8% effective in fractures of the radius and ulna. Among the remainder, there were a small number requiring re-healing, as well as instances of angular changes of more than 20 degrees, mild pain, and locomotor hindrances. The healing period for tibia-fibula fractures required 27 to 50 days on the average for adults, but only 27 days for minors. In radius-ulna fractures, it, on an average of 44 days, was required for adults, and only 21 days for minors.

The Nan-ning Workers' Hospital (1958) in its combined Chinese-Western treatment of 71 cases of various types of closed fractures, generally obtained complete reduction of swelling within three to five days, reduction of pain, clear shortening of the healing period, and rapid recovery of function after realigning and fixing the fracture with Chinese traditional methods and using Chinese drugs either externally or internally.

The Research Laboratories of Internal Medicine and Surgery of the Research Institutes for Chinese Traditional Medicine, found in clinical observations on more than 300 cases of closed fracture, no instances of bones failing to knit or of delayed healing. Recovery of function was satisfactory.

Chinese traditional treatment of fractures is definitely highly

effective, as can be seen from the above illustrations. We will now bring up a few examples of individual fractures and special treatments.

The Shanghai Health Bureau reported (1958) that the Shanghai I-miao District used Chinese traditional treatment with internal and external application of drugs and double splints for limb fractures. Bones knitted correctly, function recovered quickly, pain reduced, and the overall results very satisfactory for two cases treated for fracture of the femur. The double splinting method is as follows: A short splint is applied to the area of the fracture. Then, two gauze wrapped splints, extending to the heel, are placed on the inner and outer sides of the fracture. It is then bound.

The Department of Osteology of the Peiping Medical School Hospital (1958) used Chinese traditional bone-setting techniques in treating 12 cases of fracture of the patella, setting the bones generally without anesthetic, and using external and internal drugs to reduce swelling, relieve pain, remove extravasated blood, and knit the bone. "Wrap the kneecap (pao-hsi-chih) paper, cardboard, and bamboo splints were used. In the course of a month, local drugs were changed every two or three days. Extension and flexion of the knee joint was begun after the second month. Beginning with the third month, walking with assistance is begun. In general, function is recovered in three to five months. This method of treatment is far better than others in respect to such factors as complete recovery of function, lack of pain, lack of fluid collection, arthritis and articular abnormalities. It is especially suitable for older people. In order to shorten the treatment period, the above hospital proposed that movement of the kneecap joints be begun early. In three experimental cases, walking was resumed after two months.

In fracture of the patella, long term immobilization can lead to stiffness of the knee articulation. Not only can Chinese traditional medicine prevent this, but it also has means to treat it. In three cases treated at the Peiping Chinese Medical Hospital, stiffness resulted from a three year period of gypsum fixing following surgery for tuberculosis of the patella, and the other two from long term gypsum fixing of fracture of the femur. After the use of the an-mo and t'ui-na methods, as local drugs, satisfactory results were obtained.

The Chinese traditional technique for replacement of dislocations of the shoulder and patella are effective not only in fresh dislocations, but in long standing dislocations as well. The Shensi Division Laboratory of Chinese Medical Research of the Chinese Academy of Medical Sciences (1958) reported on Dr. Chu Hsing-kung's (朱兴恭) setting technique for dislocation of the shoulder as follows: The patient lays on his side with the injured side on top. The injured limb is grasped and drawn out to an angle of 90 degrees, and drawn in at the same time. After this, it is flexed 30 degrees toward the back, at the same time forcibly revolving it forward. Then, move it forward to the chest wall and slide it along toward the anterior portion of the chest so that the forearm of the injured limb reaches the midline. At this time, the assistant places his thumb on the collar bone, presses down, and pushes

the head of the humerus into place. The method of correction of dislocated patella is as follows: the patient is made to lay flat. The assistant holds the bone firmly. Another person pulls on the limb, and forcefully flexes it. The limb is elevated, and the assistant, twists inwards and extends the limb. The doctor pushes the head of the femur anteriorly and downwards into position. The above laboratory used this method to treat cases of both fresh and long standing dislocations of the shoulder and patella. Of those treated, fine results were obtained in more than 40 cases of dislocated shoulder of four to eight months standing. The most conspicuous feature of this method is that of pushing the dislocated head of the bone into place aside from the techniques of drawing out the limb and twisting of the limb.

In treating long term dislocation of the shoulder, Chinese traditional medicine also has the "ladder pull method (t'i-shang ch'ien-yin-fa)." The Chinese doctor Ko Yun-pin (葛云彬) of the Research Institutes of Chinese Traditional Medicine at the "Hopeh Province Conference for the Exchange of Experiences in Chinese Traditional Bone-Setting Techniques" used this method to repair a dislocation of the shoulder of five weeks duration, avoiding a previously planned surgical intervention. In the "ladder pull method," damp, warm towels are applied ten or more times to the shoulder. After this, the doctor grasps the injured limb, twisting it inwards, then outwards, flexing it anteriorly and extending it posteriorly, and straightening it with only a very small movement of the head of the humerus. A wooden ladder is then leaned against a wall, and the patient stands on a lower rung. The armpit of the injured limb is hung over a cotton covered ladder-rung so that the limb hangs down. One assistant presses on the shoulder and supports the patient's trunk, and another assistant, from below the ladder, pulls the limb down. The doctor grasps the injured limb, and also pulls downward, twists and draws it inward, maintaining the pull on the limb for approximately ten minutes, causing the head of the humerus to enter its socket. After this, the limb is supported while the patient comes down from the ladder. The lower arm is flexed at a 60 degree angle, and a triangular sling and bandage is attached from the shoulder.

The use of the traditional 8 techniques of bone-setting in treating acute and chronic sprains and wrenches has also been very effective, as seen from the satisfactory results obtained in 700 cases treated by Dr. Tu Tzu-ming (杜自明) of the Research Laboratory, Departments of Internal Medicine and Surgery, Research Institutes of Chinese Traditional Medicine. He used the following treatments: fen-chin (分筋), li-chin (理筋), t'an-chin-po-lo (彈筋撥絡), kun-yao-sheng-chiang (滾搖升降), and tien-hsien-an-mo (點穴按摩).

### III. Peculiarities of Chinese Traditional Treatment of Fractures and Dislocations

Traditional Chinese methods for realigning of fractures and dislocations are many and various, and the normal condition can be attained



by the use of closed realignment, as in the case of dislocation of the patella. At the time of treatment, the patient lies down, the bone is grasped, the injured limb and knee joint put at a 90 degree angle, and as it is being turned, the knee is forcefully pulled upwards, so that the head of the femur is out of position and adjacent to the knee articulation. The doctor grasps the femur with his hands and strongly moves it anteriorly and inwards, the head of the femur now being easy to slide into articulation. This method is similar to that utilized by Bigelow, but since there is an increase of force in pushing the femur anteriorly and inwards, not only are injuries to the head of the femur decreased, but it also makes the use of anesthetics unnecessary. Practice confirms that this method not only reduces the suffering of the patient, but can also shorten the treatment period.

In traditional Chinese treatment of fractures and dislocations, gypsum is not used, but rather, cardboard, paired splints, cypress bark, cedar bark, or bamboo leaves are used. Therefore, the treatment is inexpensive, the method simple, the materials for setting light, and easy to dismantle, and is greatly welcomed by the patients.

In Chinese traditional fixing of limb fractures, there are three general types. In many cases the injured bone and adjoining joint are immobilized, while in some cases only the region of the fracture is immobilized, and not the adjoining joint. Some begin by immobilizing joints above and below the fracture as well, and on subsequent examination, gradually shorten the immobilized area to only include that of the fracture itself. Finally, with the healing of the injury, the binding materials are completely removed. Chinese doctor Mou Jen-hsien (牟仁先) advises that when the upper third of the limb is fractured, the binding should include the proximal articulation and the length of the injured limb. In fractures of the lower third, the whole length of the limb and the distal articulation should be bound. In fractures of the mid-portion, the whole length of the limb should be bound, together with both proximal and distal articulations. However, regardless of the location of the break in femur fractures, both distal and proximal articulations should be bound. Mou Jen-hsien, in treating 1,947 cases, has clinically confirmed the fact that there are no instances of bones failing to knit or of protracted healing with this type of binding.

The application of drugs applied externally in treatment of fractures and dislocations has met with effective results. If external drugs are not used, swelling does not go down in the injured region for two to three weeks. According to a report by the Fukien Province Workers' Hospital, swelling could be relieved in approximately five days on the average with the use of drugs applied externally. The Hospital of the Shanghai Academy of Chinese Medicine reports that swelling was relieved in seven to ten days and the Ch'ang-chou Chinese Medical Hospital reports relief of swelling in five to ten days. This affirms the fact that external application of drugs shortens the period of swelling. Pain can be relieved, at the earliest, two hours after the drug application. In general, relief in pain follows on reduction of swelling.

After a long period of binding, joints may become stiff. After the application of drugs externally and the use of the an-mo and t'ui-na methods, the stiffness can be gradually corrected, and a definite degree of function recovered. In the case of chronic swelling following joint surgery and those cases where the patient's function is impaired, the swelling gradually diminishes and a definite degree of improvement in function takes place after the use of externally applied drugs.

In summary, the use of externally applied drugs has had a definite therapeutic action in fractures and dislocations.

The use of oral drugs in treating fractures is also a special feature of traditional Chinese bone-setting. As confirmed from animal experiments and clinical observation, chieh-ku-tan taken orally definitely stimulates the fresh growth of bone, shortens the course of treatment, and results in early recovery of function.

The Wuhan Military Workers Hospital and the Peiping Medical School conducted experiments using two groups of dogs, a drug and a non-drug group. Fractures were produced artificially, and X-ray examination was made 17 days after the setting. In the drug group, the fractures had largely knitted, and the fracture line had already disappeared. In the non-drug group, only a small amount of bone scab had grown, and the fracture line was still present. In naked eye observations the formation of bone scab was rapid and firm in the drug group of dogs, slow and soft in the non-drug group. Examination of sections from the injury revealed the growth of many bone mother cells in the scab of the drug group. They were also quite mature. In the non-drug group this phenomenon did not take place.

Rabbits were separated into a drug and a non-drug group in an experiment on artificial fracture of the radius. Dynamics studies were made on the freshly grown bone scab (resistance to pulling and twisting forces, measured in kilograms) in the fourth week. The average body weight of the drug group was 1.94 kilograms. The pulling force resisted was 6.19 kg, and the twisting force 1.25 kg. The average body weight of the non-drug group was 2.06 kg., but the pulling force that their bone scab was able to endure was 4.82 kg., and the twisting force 0.89 kg. Therefore, the scab of the drug group could resist a pulling force 1.37 kg. larger than the non-drug group, and a twisting force 0.36 kg. larger. The general difference in their strengths was 1.73 kg.

The results of clinical observations (with X-ray observed fresh bone scab as the criterion) also clearly indicate the efficacy of chieh-ku-tan in stimulating the growth of bone scab. According to the report by the Ch'ang-chou Chinese Medical Hospital, bone scabs appeared in 14-28 days in femur fractures, 13-30 days in tibia fractures, and 12-24 days in patella fractures.

In the course of using gypsum binding in treating fractures, the patient is apt to get various secondary disease and aftereffects, such as pneumonia, bedsores, calculus of the urinary system, joint stiffness, and persistent aching of the soft tissues after healing because of the long immobilization of the proximal and distal joints, and because of the long bed-rest. However, these secondary diseases and aftereffects can

basically be avoided or diminished by using traditional Chinese methods of treatment.

At the Tung-chih Workers Hospital of the An-shan Iron and Steel Works in the Northeastern Provinces [formerly Manchuria], Chinese methods were used to treat 105 cases of fracture, and as with the 1,947 cases of fracture treated by Mou Jen-hsien, there were no instances of secondary infections, although there were aftereffects in 0.4% of the cases.

In the use of early activity treatment to bring about rapid recovery, no deleterious aftereffects have been brought about. For example, in the 1,947 cases treated by Mou Jen-hsien, there were no instances of displacement of the bone or of deformities arising as a result of early activity. According to a report of the Ch'ang-chou Chinese Medical Hospital, after the setting of fractures, the earliest period in which activity was begun was on the eighth day, and the latest on the 36th day with the average being from 10-15 days. The Peoples Chinese Hospital in the T'ung-tsu Autonomous District of Kwangsi reports that activity can be begun one to two days after setting. The Wuhan Military Workers Hospital reports that, in general, fractures, activity may be begun within two weeks, and in complex fractures, activity may be begun after swelling and pain in the injured region have stopped. However, the activity must follow a set order, i.e., begin slowly, and gradually increase the intensity of the activity. One cannot begin with activity which exceeds resistance of the limb.

#### IV. Conclusion

In recent years Chinese traditional Medicine has made fine accomplishments in the treatment of fractures and dislocations. Furthermore, its techniques of setting and binding have definitely superior points, and we especially have mature experiences with regard to internal and external use of drugs, and the use of early activity to bring about an early recovery of health. However, there are still some problems which require further research, discussion, and advancement. Under the leadership of the Party, and with the co-operation of Chinese and Western Medicine, we can produce even greater accomplishments in the future.

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